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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/685,475 | 10/10/2000 | Esa Vuoppola | 100.157US01 | 4331 |
| 34206 | 7590 | 03/30/2004 | EXAMINER | |
| FOGG AND ASSOCIATES, LLC P.O. BOX 581339 MINNEAPOLIS, MN 55458-1339 | | | NGUYEN, TU X | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2684 | 9 | |
| DATE MAILED: 03/30/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|---------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/685,475 | VUOPPOLA, ESA |
| Examiner | Art Unit | |
| Tu X Nguyen | 2684 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 07 January 2004.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-23 and 25-32 is/are pending in the application.

4a) Of the above claim(s) 24 is/are withdrawn from consideration.

5) Claim(s) 1-14, 21-23, 25-27 and 29-32 is/are allowed.

6) Claim(s) 15-20, 28 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____ .
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,3</u> . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 15-20 and 28, have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 15-20 and 28, are rejected under 35 U.S.C. 102(e) as being anticipated by Nagode et al. (US Patent 6,043,721).

Regarding claims 15 and 20, Nagode et al. disclose a method for selectively amplifying upstream signals (105, fig.2) for at least first and second wireless services, the method comprising:

receiving signals (103,fig.2);

passing a first frequency band of the received signal (206, fig.2);

amplifying the first frequency band of the received signal (206, fig.2);

passing at least one additional frequency band of the received signal without amplification (see col.3 lines 59-60).

Regarding claim 16, Nagode et al. disclose receiving signals comprises receiving signals for first and second wireless services (see col.3 lines 30-45).

Regarding claim 17, Nagode et al. disclose receiving signals comprises receiving signals in first and second frequency bands, wherein the first frequency band is higher in frequency compared to the second frequency band (see col.3 lines 59-61).

Regarding claim 19, Nagode et al. disclose passing at least one additional frequency band comprises passing a frequency band below 1000 Megahertz (see col.3 lines 30-45).

Regarding claim 28, Nagode et al. disclose everything as claim 15 above. More specifically, Nagode et al. disclose combining the first frequency band and the at least one additional frequency band into a signal for transmission (see col.3 lines 30-45).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagode et al. in view of Persson.

Regarding claim 18, Nagode et al. fail to disclose the first frequency band between 1850 and 1990 Megahertz.

Persson discloses the first frequency band between 1850 and 1990 Megahertz (see col.2 lines 25-26). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Nagode et al. with the above teaching of Persson in order to provide wireless services including signas at relatively high frequency as suggested by Persson.

Allowable Subject Matter

6. Claims 1-14, 21-23, 25-27 and 29-32, allowable.
7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding independent claims 1, 7 and 21, none of prior art teaching "a second path, coupled between the first and second ports, the second path including a filter that stops upstream signals in the first frequency band and passes upstream signals in at least a second frequency band and downstream signals in at least third and fourth frequency bands" as cited in the claim.

Regarding independent claim 29, none of prior art teaching "a plurality of amplification circuits coupled to the antenna and coupled in series, each amplification circuit adapted to selectively amplify upstream signals in a selected frequency band for a selected service and to pass downstream signals and other upstream signals" as cited in the claim.

Regarding dependent claim 25, none of prior art teaching "each base station includes an amplification circuit that amplifies signals received from wireless terminals

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for one of the service and that passes without amplification signals from other wireless terminals for the other service and passes downstream signals to the wireless terminals" as cited in the claim.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

Any response to this action should be mailed to:

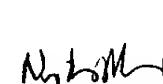
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

TN
3/19/04


NAY MAUNG
SUPERVISORY PATENT EXAMINER